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# THE FARM INDEX

U.S. Department of Agriculture / May 1973

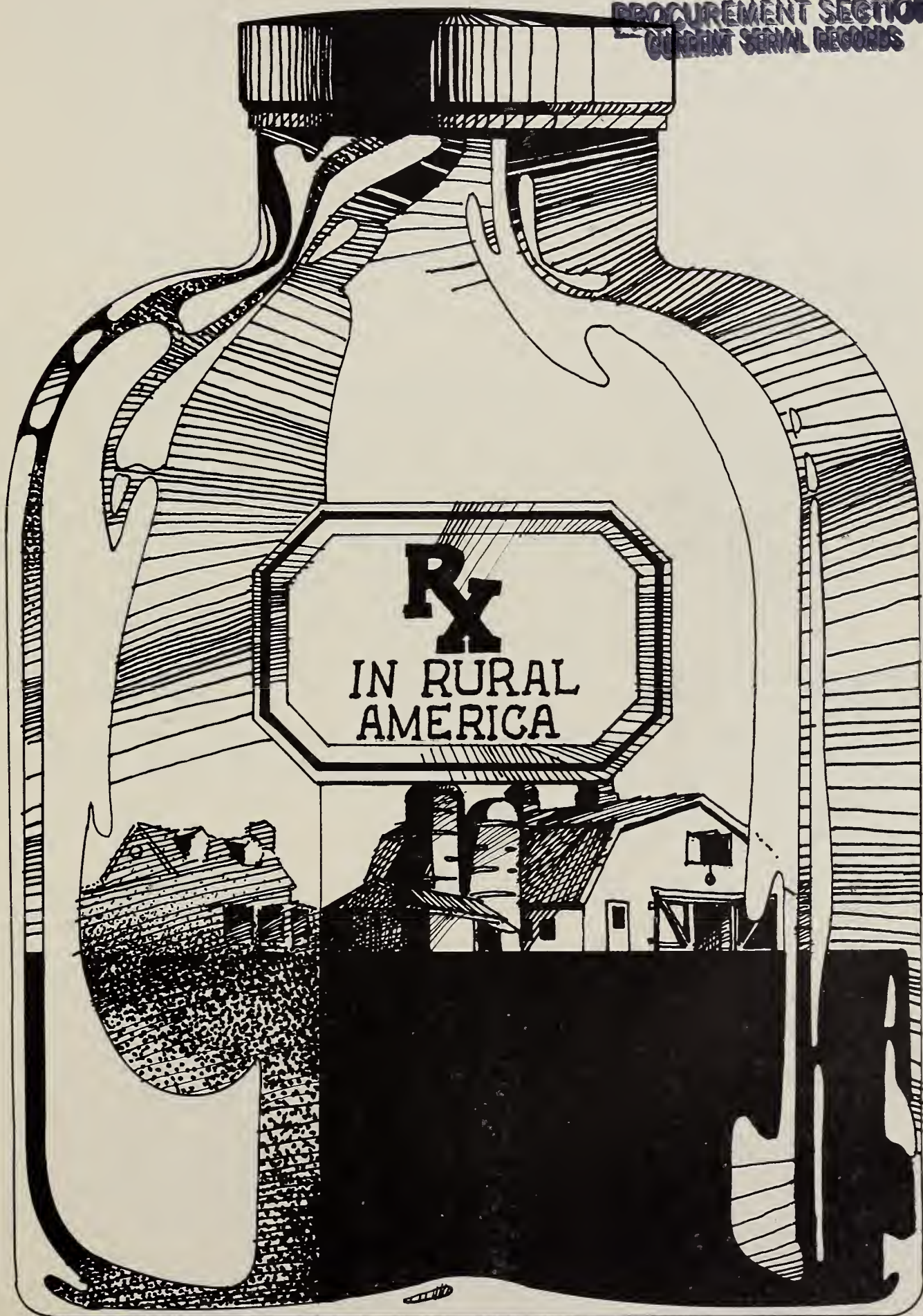
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# Outlook

**Soybean growers are shooting for another production record this year.** With good weather, and if yields stay on trend, the target shouldn't be hard to reach.

Planting intentions as of March 1 indicate a crop of 1½ billion bushels. That's 17 percent bigger than last year's record outturn. It does not take into account any additional acreage put to soybeans as a result of subsequent changes in the 1973 feed grain program.

In effect, the changes freed up some 13½ million acres for production of grains, other crops, and forage. Even if soybeans come in for a relatively small part of this additional land, 1973 plantings should total at least 54 million acres, up about 7 million from '72 and the sharpest year-to-year increase ever recorded.

However, ERS added this cautionary note in its April issue of the *Fats and Oils Situation*: "The bitter lesson learned from last fall's unfavorable harvesting weather will not be easily forgotten by farmers or traders. More than ever, chances are this year that the crop will not be considered made until safely stored in the bin . . ."

**Soybean prices between now and harvest will be heavily influenced by prospects for the new crop.** For the marketing year ending August 31, prices will probably average out to around \$4 a bushel—a dollar more than in 1971/72 and an alltime high. Prices have been kicked up by a growing world demand for high-protein feedstuffs, cessation of Peru's fishmeal production, and the weather damages to the U.S. soybean crop in '72.

Demand for old crop soybeans continues at a fast clip. Usage this season will about match the 1972 production of 1,283 million bushels, making the fourth year in a row that use equals or exceeds production. Carryover stocks by season's end will be eroded to minimum operating levels—possibly to around 60 million bushels.

Exports, also at record levels, are running about a fifth ahead of a year ago. Shipments are projected to approximate 475 million bushels for the full season, 14 percent above 1971/72.

**Consumers can look forward to seasonally increasing supplies of broilers in the next month or so.** Though prices won't drop to what they were a year ago, they will come down from the February-April levels—highest since the mid-1950's.

One reason we're paying more for broilers these days is a rise in feed costs since last year. Broiler producers reacted by cutting back on chick placements. Now that feed costs show signs of easing, it's expected that broiler growers will be encouraged to expand marketings in late summer and fall.

Outlook for turkeys reads much the same: bigger output in the coming months, but prices will continue strong. Production for all of 1972 promises to at least equal last year's record.

The look-ahead for eggs points to prices well above last year's depressed levels throughout most of '73. As usual, prices will dip in the spring, and then begin moving up again in the summer.

**U.S. cotton exports got off to a sluggish start in 1972/73, but they've since staged a vigorous recovery.** Year-end shipments will likely total 4.7 million bales—up from last season's 3.4 million and the most since 1966/67.

All in all, this marketing year has been out of the ordinary for U.S. cot-

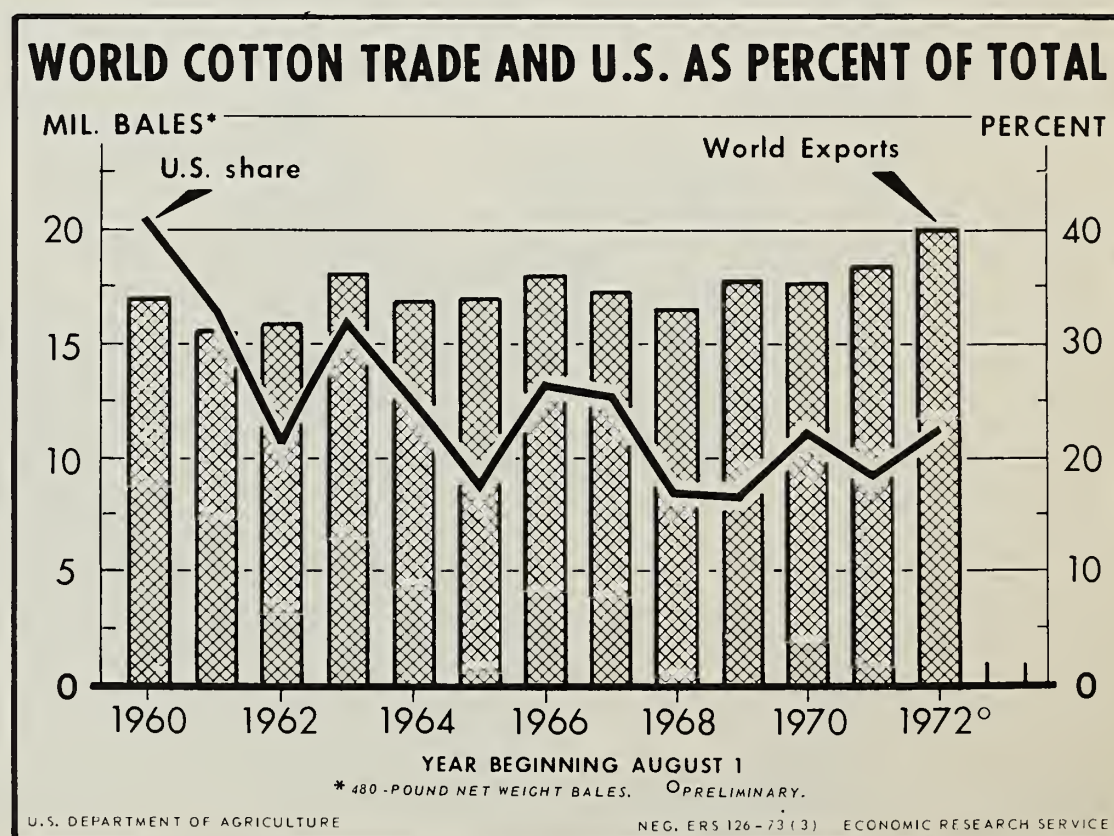
ton trade. Despite relatively high prices, somewhat restricted U.S. supplies, and keener competition from manmade fibers, world demand for cotton remains strong. Many importing countries began the season with low carryover. A number of producing countries had poor crops. Foreign mills turned to the U.S. for more of their needs, and American exporters found themselves in a comparatively favorable position to satisfy this demand.

As a result, U.S. cotton is expected to account for two-thirds of a 2.2-million bale gain in world cotton shipments in 1972/73. This brings our share of global exports to nearly one-fourth, compared with less than one-fifth last year.

**On the domestic front, cotton production is in for a significant decrease this year.** Farmers will plant 13.1 million acres (March intentions) against 13.9 million last year. Smaller plantings mainly reflect a 13-percent cut in the national base acreage allotment and stepped-up competition from other crops—notably soybeans—for use of land.

Assuming yields average around a bale per acre, output would hit slightly over 12 million bales, about 1½ million below 1972.

Despite reduced production, there





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will be more than enough cotton to take care of prospective usage in 1973/74. Disappearance may not equal the 12.4 million bales estimated for this season, and stocks may build somewhat.

**In 8 years out of the past 10, corn farmers stuck remarkably close to their spring planting intentions.** Actual sowings deviated from the March 1 indications by less than 1 percent. This year, plantings are likely to swing wide of that mark, and should be much larger than the 71½ million acres farmers said they'd plant on March 1.

As a result of changes in the feed grain program announced on March 26, an additional 2½–3½ million acres may go to corn, with a smaller increase to the other feed grains.

Acreage in all feed grains combined would total 122 million acres if farmers carried out their March 1 plans. A normal growing season would give a crop of about 209 million tons, 5 percent more than in 1972 and 1 percent more than the 1971 record. The increase from last year's 200 million tons would probably keep 1973/74 stocks from falling and would ease the tight supply situation.

Meanwhile, feed buyers are paying the highest prices ever for ingredients. However, feed costs are likely to be lower this fall, barring an abnormal growing season. Most of the price rise has been for protein feeds which are in short supply around the world.

**With supplies of several processed vegetables on the short side, growers expect to expand their plantings by 9 percent for the eight important crops to be harvested this season.** These include all the major items—snap beans, sweet corn, peas, and tomatoes.

Allowing for trend and normal acreage abandonment, growers' planting intentions add up to a 13-percent increase in total tonnage of processing vegetables. This suggests generally ample supplies in late summer and early fall. A few items might even be in surplus. Heavy supplies would be indicated for canned tomato products, and possibly, canned peas.

## FARM

## CONSUMER

## RURAL

## SPECIAL REPORTS

## FOREIGN

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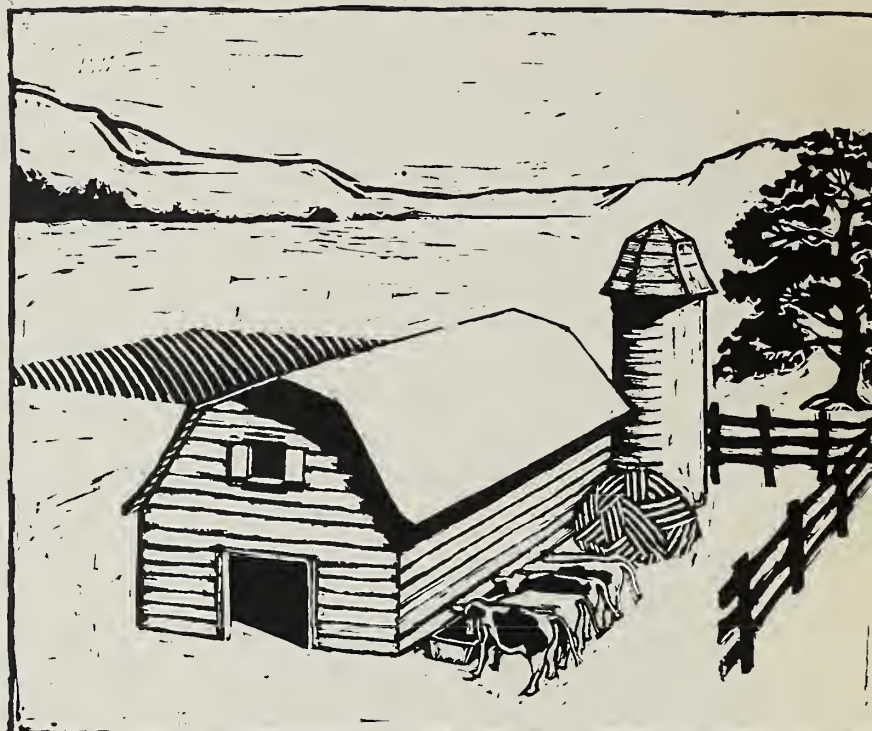
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# Death Taxes... and the Farm



*In its latest study on Federal estate and gift taxes and their impact on the farm sector, ERS tells why these taxes pose a potential threat to the family farm.*

Ten years ago, a farmer needn't have gotten very concerned about the Federal taxes due on his estate.

Most farms weren't so large but what they were under the \$60,000 tax exemption.

But in the past decade, production assets per farm have more than doubled, exceeding \$100,000 last year. Federal estate and gift tax exemptions, however, have remained virtually unchanged since the early 1940's.

A new ERS study points out that for the first time, these taxes may begin to pose a serious threat to keeping the family farm intact.

**Big bite.** In a study of 21 typical owner-operator farm situations, ERS found that death taxes—including those imposed by the State—could, in the absence of planned estate transfers, take nearly 20 per-

cent of total farm capital of three types of farms: irrigated cotton farms in the Texas High Plains, cotton farms in the Mississippi Delta, and cattle ranches in the Northern Plains.

Even more serious than the actual amount of death taxes is the fact that most farms can't quickly convert assets to cash to pay taxes. Most of a farmer's assets are fixed—in land and buildings—and a heavy death tax load could require selling part of the farm.

The subject is made even more topical for farmers by the fact that Congress is considering major revisions of Federal estate and gift tax laws.

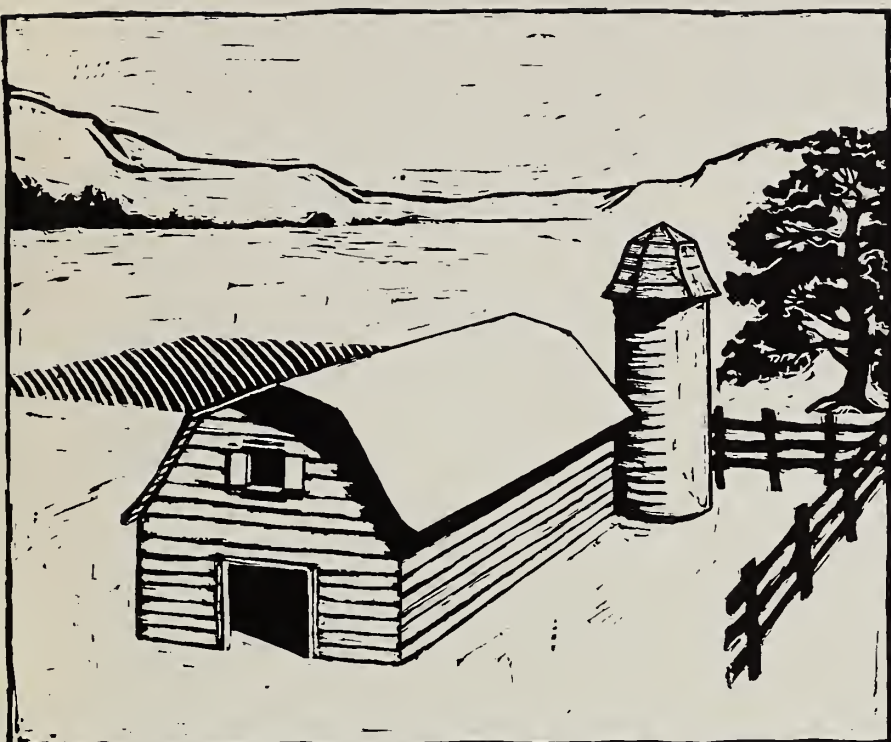
**Potential is there.** So far, death taxes don't absorb a large portion of capital on most farms. But because farms have rapidly grown in size and value in recent years . . . and because death taxes are figured on a graduated scale (from 3 percent to 77 percent for the Federal estate tax), they are taking an ever-increasing share of farm capital.

To illustrate, take a typical Corn Belt hog-beef farm. If its production assets increased at the same rate from 1968 to 1972 as did farms generally around the country, its production assets would have been \$240,000 last year. Federal and State death taxes in this case would have climbed from less than 2 percent of farm capital in 1968 to 10 percent in 1972, due to the graduated nature of the tax. (This illustration assumes, for convenience, that farm production assets approximate the gross estate, which may not be the case in actual practice.)

**In the lead.** The Texas High Plains' irrigated cotton farms had the biggest increase in total potential death taxes during 1961-68. Death taxes went from a tenth of 1 percent to almost 20 percent as capital per farm quadrupled.

Cash grain farms in Illinois took a steep climb in these years, too. Death taxes went from 1 percent to 9 percent of the estate after allowed deductions. And capital assets for the average farm more than doubled.





To illustrate the liquidity problem, let's look at an Iowa study that, though published in 1959, remains the latest available data.

**Sudden death.** Researchers surveyed 76 farmers and found that if these farmers were to die on the day they were interviewed, fewer than 10 percent would have enough liquid assets to pay estate settlement costs and death taxes. In about 12 percent of the cases, heirs would have to convert farmland into cash—through borrowing or selling to pay costs and taxes.

Of the 21 typical owner-operator farm situations ERS examined, all but four had 70 to 90 percent of their farm capital in land and buildings.

The liquidity problem is especially serious for large farms. For instance, death taxes can take from 15 to 19 percent of total farm capital for cattle ranches in the Northern Rockies and Northern Plains and for cotton farms in the Mississippi Delta.

**Research topic.** For all these rea-

sons, ERS reports estate planning is more important than ever for the farmer—and some of ERS's future research is going to be in this direction.

There are a number of ways that some of the heavy tax burden can be lightened—but these methods aren't widely used by farmers.

For instance, if property is given away during one's lifetime, you pay a gift tax instead of an estate tax and the rate of taxation is lower. Moreover, the gift tax rate, nominally 75 percent of the estate tax, decreases to an effective rate of 56 percent of the estate tax rate for a transfer of \$10,500 (after taxes) to 40 percent for \$1.5 million, and to 17 percent for a \$10 million transfer.

**Unused.** With the tax advantage favoring gift transfers, it's surprising to find they are used only in a minor way, especially by owners of large estates.

A special study in the late fifties by the Treasury Department showed this: of some 2,200 decedents with gross estates of \$1 million or more,

about half had made any taxable gifts at all during their lifetime.

Under present law an individual can, during his lifetime, give \$30,000 tax exempt. In addition, he can give \$3,000 each to individuals each year. For married couples, these amounts are doubled.

**Start early.** A couple with two children and four grandchildren could easily transfer an estate of over \$700,000 without paying taxes. To do this, the couple would only have to start a program of systematic giving some 10 to 15 years prior to the end of their actuarial life expectancy.

By the same token, if they made no gifts during their lifetime, the Federal estate tax could be over \$200,000 on a \$700,000 taxable estate.

The Federal estate and gift taxes are unique in that they have been substantially unexamined and unrevised since the early 1940's. They still have the same exemption and the same rate scale—a fact not duplicated by any significant Federal,



State, or local tax over this time period.

**Reasons for reform.** During this time a number of inequities have de-

veloped, economic conditions have changed, and added revenues are needed to finance government activities—all reasons for tax reform measures.

Of the general proposals affecting farmers, taxing capital appreciation at death would have the greatest impact on farm estates. This proposal also departs most radically from current tax rules.

Under present law, assets which have appreciated but which have never been sold are not taxed as capital gains. As part of an estate the assets are subject to an estate tax but the appreciated value is never taken into account and taxed as income.

Some tax experts feel the present law is inequitable in that it gives an advantage to persons who accumulate their wealth through untaxed appreciation compared with those who accumulate their wealth through savings from taxable income or who have to sell their appreciated assets prior to death.

**Lengthening payments.** Among the other tax reform proposals that would affect farmers is one to liber-

alize rules concerning payments.

While careful business and estate planning can alleviate or eliminate many liquidity problems, the very nature of farming does not always permit the needed planning and flexibility to achieve liquidity for prompt payment of estate taxes. Proposed changes will likely be specifically designed for the farmer and other closely held businesses to facilitate payment for up to 10 years. (1)

## Rice Cheaper by the Acre In Southwest Louisiana

The cheapest place to grow rice in the U.S.?

Per acre, production costs are apt to be lowest in Southwest Louisiana. Per hundredweight, Northeast Arkansas is probably where rice can be produced most economically. This area also may have the highest net returns per acre, according to a recent ERS study of our six main rice areas.

In making its estimates of costs and returns to rice farmers, the study team analyzed published data and interviewed key people connected with the rice industry, including some farmers.

Following are some of the study's findings for costs and returns per acre (returns in parentheses) to owner-operators in 1972:

Southwest Louisiana, depending on soil type, \$153-\$162 (\$68-\$91); Northeast Arkansas \$180 (\$132); Grand Prairie of Arkansas \$187 (\$119); Mississippi River Delta \$193 (\$119); Coast Prairie of Texas \$216-\$260 (\$47-\$62); and the Sacramento Valley of California \$284 (\$49).

In most areas the net returns in 1972 were at least twice what they were in 1966 when a similar study was conducted. Economists attribute this improvement to steady increases in yield per acre, which offset higher costs, and to better prices received for rice. Prices to farmers averaged around \$6 per hundredweight in 1972. This compares with \$4.80 in 1966. (2)

### FARM CAPITAL MOSTLY IN LAND AND BUILDINGS

Type of Farm	Value of land and buildings as percent of farm capital
	Percent
Dairy (Southeast Wis.)	64
Poultry, eggs (N.J.)	80
Broilers (Ga.)	78
Hog-beef fattening (Corn Belt)	72
Cash grain (Corn Belt)	90
Cotton (Miss. Delta)	84
Tobacco (Coastal Plain, N.C.)	87
Tobacco-beef (Ky.-Tenn.)	79
Winter wheat (Southern Plains)	84
Cattle ranches (N. Rocky Mts.)	69
Cattle ranches (Southwest)	80
Sheep ranches (Utah-Nev.)	61
Average, all U.S. farms	78

### ESTIMATES OF DEATH TAXES FOR FARMS, 1961 AND 1968 <sup>1</sup>

Type of farm	Total farm capital per farm <sup>2</sup>		Federal and State death taxes as percent of capital	
	1961	1968	1961	1968
	- - - Dollars - - -		- - Percent - -	
Dairy (Southwest Wis.)	62,400	102,800	2.5	2.9
Cash grain, Corn Belt (Ill.)	105,900	227,700	1.1	9.0
Hog-beef fattening, Corn Belt (Mo.)	86,800	175,600	0.8	1.8
Cotton, irrigated High Plains (Tex.)	117,300	464,900	0.1	19.8
Cotton, Miss. Delta (Miss.)	214,400	440,000	6.1	17.7
Tobacco (N. C.)	<sup>3</sup>	50,400	<sup>3</sup>	1.3
Wheat-fallow, Wash-Ore. (Wash.)	<sup>3</sup>	205,100	<sup>3</sup>	7.1
Winter wheat, S. Plains (Kan.)	96,300	147,100	0.2	1.8
Cattle ranches, Southwest (Ariz.)	160,700	220,100	2.1	6.4
Cattle ranches, N. Plains	<sup>3</sup>	406,500	<sup>3</sup>	19.0
Cattle ranches, N. Rockies (Idaho)	<sup>3</sup>	298,700	<sup>3</sup>	15.2

<sup>1</sup> Property assumed to pass one-half to widow, one-fourth to each of two adult children on death of husband. Widow's share passes equally to each of two adult children on her death. <sup>2</sup> Land, buildings, improvements, machinery, equipment, and crops. Farm is assumed to be the only asset in the estate and to be debt-free. <sup>3</sup> Not applicable.



# TALL ORDER FOR SOYBEANS

We're going to need a lot more land in soybeans.

It's an old tune but one which our farmers haven't tired of hearing. Since 1950 they trebled their plantings, as soybeans shot from obscurity to be the Nation's most widely cultivated crop after corn and wheat.

The way ERS soybean experts view the situation, soybeans could become our No. 1 crop by the mid-1980's.

These experts expect soybean utilization will soar two-thirds between now and 1985—domestic use up a half and exports about doubling.

Barring a major breakthrough in production technology, it would take about 63 million planted acres to fill the projected demand. This compares with 47 million planted last year and 54 million indicated for 1973 in the March 1 survey of farmers' planting intentions.

Main forces propelling soybean demand in the eighties will be growth in population and income. However, domestic use of food fats and oils and protein meals is projected to rise faster than population. And soybeans will be called on to satisfy most of this market. Total supplies of other U.S. edible oils and high protein feed will probably show little net expansion by 1985.

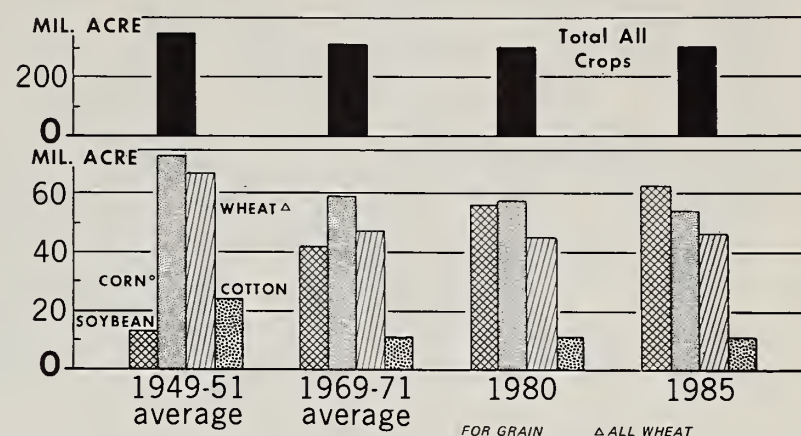
The 1985 demand for U.S. soybeans is expected to break down like so: 1.2 billion bushels for the domestic market; 1 billion for exports; and 0.2 billion for carryover, equal to 1 month's total requirements.

At home, use of soybean oil may rise by 0.3 billion pounds a year and will capture an ever-increasing share of the market for food fats. This will leave proportionately less for export than in recent years.

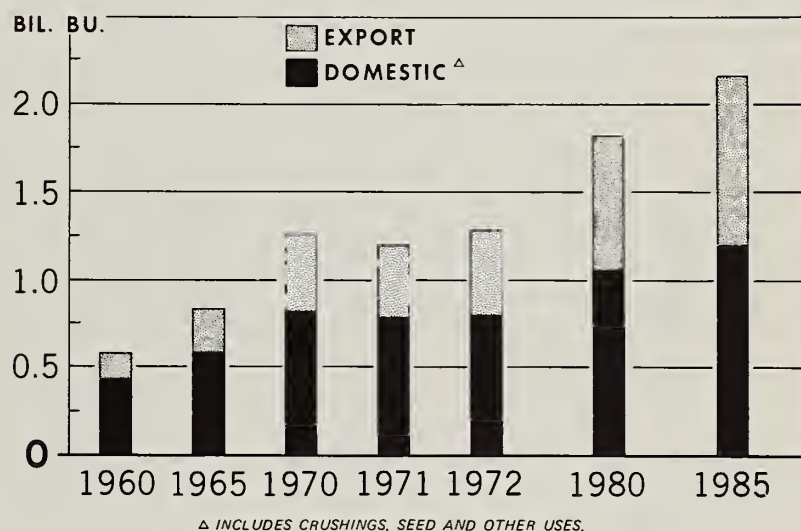
The domestic market will also eat up most of the gain in supplies of soybean meal, projected to jump from about 18 million tons this year to 26 million by 1985.

All this assumes that farmers will in fact plant 60-million-plus acres to soybeans. The rub is, says one ERS specialist, soybeans must compete in most production areas with corn. And a price ratio of 3 to 1 or more in soybeans' favor would be needed to attract land into soybeans. Historically, that ratio has been running about 2½ to 1. (3)

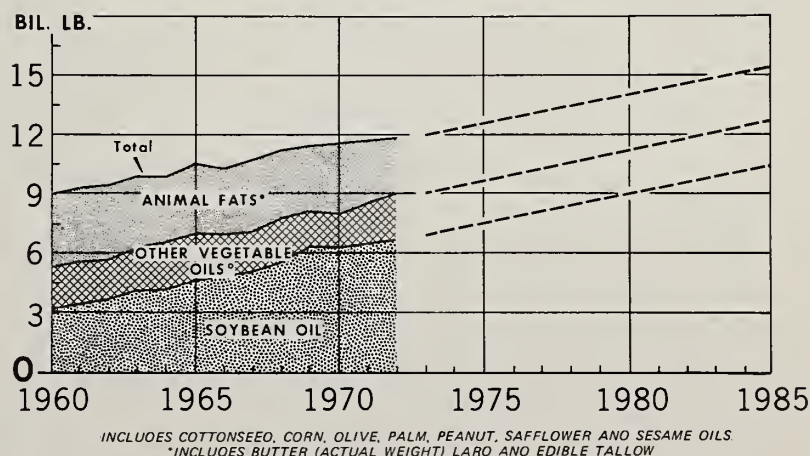
## Crop Acres Harvested: Soybeans Moving to the Fore



## Soybean Demand: Two-thirds Increase by 1985



## U.S. Use of Food Fats and Oils: Soybean's Lead To Widen





## Catfish at the Checkout Counter: A Supermarket Survey

There's behind-the-scenes work to be done to lure more shoppers to buy more farm-raised catfish at the supermarket level, an ERS study indicates.

It reports that if cost-saving technology could be introduced along the production-processing-marketing chain, sales could be increased substantially—through a combination of lower prices and market promotion.

If the price would drop from \$1.19 per pound to 99¢—a 17-percent decrease—the study calculates that sales would go up 70 percent.

Production by the emerging farm-raised catfish industry is estimated at 50 million to 60 million pounds liveweight a year, with farm value at \$20–\$24 million.

Most sales are either through recreational or local markets, but future expansion depends greatly on the processed catfish market. The processing market was nonexistent before 1967 but has nearly tripled in the past 3 years, with firms processing 18 million pounds on a liveweight basis last year.

In the ERS study involving Atlanta supermarkets, researchers checked sales of fresh packaged catfish—displayed in the meat counter next to poultry—for 6 weeks. Prices were changed each week from a low of 79¢ a pound to a high of \$1.29.

The researchers found customers reacted strongly to these price changes. At \$1.19 a pound, which was the going price at the time of the study, sales were slightly over 13 pounds per 1,000 customers per week. By lowering the price to 79¢, supermarkets sold an average of 40 pounds per 1,000 customers. When the price was raised to \$1.29, sales dropped to 10 pounds.

At the low price of 79¢ a pound, 1 in 50 customers bought catfish . . . and 1 in 200 were trying it for the first time. At the prevailing price of \$1.19 a pound, only 1 in 150 shoppers bought the product . . . and 1 in 650

were trying it for the first time.

Based on Bureau of Commercial Fisheries estimates updated by ERS, the \$1.19 per pound can be broken down as follows:

<i>Producer</i>	
Production expense	-----\$ .26
Harvest and transportation	---- .06
Profit	----- .02
Grower price	----- .34
<i>Processor</i>	
Price of product <sup>1</sup>	----- .59
Processing expense	----- .17
Profit	----- .01
F.O.B. processing plant	----- .77
<i>Wholesaler<sup>2</sup></i>	
F.O.B. processing plant	----- .77
Selling and transportation	---- .10
Profit	----- .01
Wholesale price	----- .88
<i>Retailer</i>	
Price of product <sup>3</sup>	----- .98
Expense	----- .20
Profit	----- .01
Retail price	----- 1.19

<sup>1</sup> Assuming a dressout of 58 percent.

<sup>2</sup> Processor may assume this function.

<sup>3</sup> Assuming a 10-percent product loss.

Given the current average price of about \$1.19 a pound, if every supermarket in the country carried fresh farm-raised channel catfish—and if it were as popular as it is among Atlanta customers—catfish farmers could expect 20 times as much supermarket business as they have today.

The study indicates supermarket sales of catfish under these conditions would be 109 million pounds a

year. Farm weight would be about 190 million pounds compared with less than 10 million pounds for supermarket sales now.

In a questionnaire distributed to customers, ERS found there was one group of “hard-core” catfish buyers who wanted only the simple fresh dressed product, and another group who would not buy the fresh fish but wanted it in a more convenient form such as heat-and-serve or frozen and breaded.

The industry could expand considerably if a convenience-type product could be developed at a reasonable cost, according to the study. (4)

## Grain Storage Costs Going Up in 1973-74

The average cost to store a bushel of grain in commercial elevators, which remained relatively unchanged between 1970–71 and 1971–72, is expected to jump in the 1973–74 season.

Higher costs of major inputs, along with some reduction in storage volume, may result in a 15-percent increase from the 1971–72 level of 14.9 cents per bushel.

Combined costs of handling and storing grain at country elevators is estimated at 22.1¢ per bushel, up 2.9¢ from 1971–72. This includes the cost of storage for 1 year plus the cost of receiving by truck and shipping by rail.

At inland terminals, the total 1973–74 cost of receiving and shipping by rail plus 1 year storage is estimated to average 21.1¢ per bushel, an increase of 13 percent (2.5¢) over 1971–72.

For port terminals, the cost of receiving by rail, 1 year storage, and shipping by water, is placed at 27.2¢ per bushel in 1973–74—about 11 percent (2.6¢) more than in 1971–72.

The 1973–74 average occupancy level in commercial elevators is estimated at 54.7 percent compared with 55.3 percent in 1971–72.

These projections are based on elevator cost data collected from 175 elevators in 1972. (6)

### Costly Pesticide Ban

Farm production costs would have risen by an estimated \$10.4 million in 1972 had there been a ban on farm use of lindane and benzene hexachloride (BHC). Of that figure, ERS reports, about \$10 million would have gone for substitute insecticides, with yield losses accounting for the remainder.

Most of the added costs—\$9.3 million for substitute insecticides—would have been borne by livestock producers, and most of this by cattlemen, \$6 million or 32¢ per head treated. Cost to hog producers was estimated at \$3.1 million or 12¢ per head. (5)



*More and more consumers are discovering that the Thanksgiving turkey, sold whole, in parts, or processed, is a nutritious and cost-saving meal the year-round.*

The turkey may not be nature's most beautiful fowl.

But the traditional Thanksgiving bird—which scientific breeding practices have made plump and often ungainly—is looking better and better to consumers.

While still far less popular than its red meat competitors at the food counter, the turkey is making impressive production and consumption gains, and is becoming, instead of merely a holiday treat, a bird for all seasons.

**No paltry poultry.** According to a new ERS study of the turkey industry, cash receipts from 1972's turkey crop reached an all-time high of \$537 million, up \$36 million from a year earlier and an increase of nearly ten-fold over 1935's \$59 million.

Likewise, per capita consumption has jumped: In 1935, the average American ate 1.7 pounds of turkey per year. In 1972, we ate 8.9 pounds per person, a new record. This is still far below beef and pork, which weighed in at 116 and 67 pounds, respectively. It is also below broilers, which registered per capita consumption of 40 pounds in 1972.

But there are indications that turkey is becoming more of a year-round fare.

In 1960, 56 percent, or more than half of all the turkey we consumed, was eaten in the last quarter of the year—over the Thanksgiving-Christmas period. By 1972, this had dropped to 46 percent.

So far in 1973, the production trend is upward.

In January, producers in 20 States planned to raise 128 million turkeys this year, 4 percent more than in 1972.

Slaughter rates also are higher. In January, 4.6 million turkeys were slaughtered under Federal inspection, up from 3.8 million in January 1972. But the real boost, say ERS

# TALKING TURKEY





turkey specialists, is in the area of cut-up and further processed birds.

**Processed to please.** More than half of the turkey meat output in 1972 was cut up or further processed. Cut-up accounted for 17 percent of the total turkey certified ready-to-cook in Federally inspected plants, and further processed, another 36 percent.

The further processed meat takes in turkey rolls, roasts, frozen dinners, pot pies, and ground turkey. Though pot pies and frozen dinners headed the list of processed turkey products purchased in the mid-1960's, the rolls and roasts have been gaining rapidly since then.

Turkey roasts first began to be sold commercially in the early 1960's.

### *Birdbrain*

Whatever the turkey's salient nutritional and economic qualities, it is not one of nature's brighter animals.

In fact, simply teaching newly hatched poult to eat can pose something of a problem. The starvation rate among some flocks can go as high as 5 percent when young turkeys fail to feed.

One remedy, turkey producers have discovered, is to place brightly colored marbles in the mash. The poult pecks at the marbles, his beak slides off into the feed, and after a dozen tries he finally begins to eat.

The turkey also has a drinking problem. If left too long without water, he will sometimes overcompensate by drinking himself to death.

Whole turkey flocks have been known to commit suicide after a low-flying aircraft causes panic in the ranks and the birds beat themselves to death against the sides of their enclosure.

Or, if a predator such as a fox or coyote enters the pen, the birds, in their fright, can pile up in layers and seriously injure each other.

Along with this nervous temperament goes an unexciting love life. The turkey's chances of finding a natural mate are practically nil, as artificial insemination is used about 100 percent of the time.(8)

An immediate success, they showed a fivefold increase in volume in the short span of 4 years after their introduction. The roasts, normally consisting of raw, frozen, deboned turkey meat in 1-5 pound sizes, now account for nearly one-third of all further processed turkey products.

Turkey rolls, sold cooked with binder added in 10-pound sizes or larger, are mainly for the institutional market. Smaller turkeys are also coming on the market in increasing numbers.

This wider choice of forms in which turkey is now available is making it more competitive with red meat. One Washington, D.C., grocery chain—whose display recipes show ground turkey substituting for ground beef—reports that ground turkey is moving well. The store recently raised the price from 69¢ to 73¢ per pound, 14¢ more than the whole frozen turkeys it sells, but still 20¢ less than regular ground beef.

This is a primary reason for turkey's increased attractiveness.

As cost-conscious consumers react to high meat prices by searching for more economical sources of protein, the holiday turkey—in one of its everyday forms—is appearing as a versatile, cost-saving alternative.

**Protein packed.** Nutritionally speaking, shoppers could hardly make a better choice. Ready-to-cook turkey is 24 percent protein, compared to 19.5 percent for beef.

The fat content of turkey is generally lower than beef, and the fat is also less saturated. Three ounces of light roast turkey meat contain 150 calories, against 165 in the same amount of lean chuck roast. Dark turkey meat is somewhat higher in calories than light (175 calories in 3 ounces), but still contains less calories than most beef cuts.

By 1980, the recent ERS study says, the turkey will be well on its way to becoming more than just a fair-weather fowl. That year's per capita consumption is projected at 10 pounds, with close to half of all turkeys slaughtered going into the plant for further processing. (7)

## Americans Craving More Cheese and Lowfat Milk

We're drinking more glasses of lowfat milk and slipping thicker slices of cheese into our sandwiches.

An ERS tally shows these two products racked up the biggest sales gains at the dairy counter in 1972, with further increases in prospect this year.

On a per capita basis, cheese consumption advanced 9 percent last year to over 13 pounds. Lowfat and skim milk, also up 9 percent, reached 32 quarts per person.

Larger helpings of these items, along with increases in cottage cheese and ice cream, more than offset per capita declines in some other dairy foods.

The milk going into all dairy products in 1972 worked out to 563 pounds per person, or 5 pounds more than the year before. This marked the first time since 1955 that per capita consumption went up. (10)

## 10-City Survey To Probe Impact of Unit Pricing

Unit pricing—you can probably get it if you want it.

This aid to the economy-minded shopper is now available in food stores throughout our larger cities.

The question is, who really wants unit pricing? Those who've tried to find out can't seem to agree on who uses it . . . whether it's helpful to most consumers . . . what it costs the retailer . . . and whether the cost is worth it.

So, the Government Accounting Office (GAO) is planning to conduct a 10-city survey of unit pricing, the largest yet undertaken. GAO specifically wants to determine the impact unit pricing has on shoppers in a "normal buying situation."

The full study, to be published in a report to the Congress, will include comparisons between shoppers' behavior in unit pricing and non-unit pricing stores. Costs to the retailer will also be examined to learn whether the system does what it's



supposed to and whether it's worthwhile.

The whole idea of unit pricing is to take the guesswork out of prices and make it easier for the consumer to compare costs. Unit pricing tells the shopper how much products cost by the ounce, pound, pint, quart, or some other common denominator.

The system is now offered by over 100 retail food chains—marketing a big share of the Nation's food—with stores in the major population centers. Most of these companies have introduced unit pricing within the past 3 years. (11)

## Cigarette Use Reaches Record High

Cigarette output, use, and exports all set records again last year.

Output during 1972 rose 4 percent to 599 billion cigarettes. Most of the gain came in the first half of the year, when manufacturers restocked inventories drawn down during 1971.

Americans there and overseas smoked 2 percent more cigarettes than a year earlier. But per capita consumption—estimated at 202 packs—held near the 1971 level. This was still 7 percent shy of the 1963 peak. Total consumption is expected to drift slightly higher this year, with further growth in the smoking age population—persons 18 and over.

Exports of U.S. cigarettes advanced 9 percent during 1972. Their declared value reached \$202 million—reflecting both higher unit values and larger quantities. Mounting foreign demand will probably boost cigarette exports again this year.

Filter-tip cigarettes continue to dominate cigarette production. Last year, filter-tips notched up their share of total output from 82 to 83 percent. Most of the gain was in the 100-millimeter size, which accounts for just over a fifth of production.

Retail prices rose about two cents a pack throughout 1972, due to higher cigarette taxes in several States and wider wholesale-retail margins. A few States have slated tax increases for this year. (9)

## SECTIONING OFF THE ORANGE CROP

Breakfast without \_\_\_\_\_ is like a day without sunshine.

According to an industry survey, over four-fifths of the housewives queried had little trouble filling "orange juice" in the blank. But the success of ad slogans like this one is not the only reason that orange juice is becoming an increasingly familiar drink to many consumers.

The commercial introduction of frozen concentrated orange juice in 1945 set off a spurt in the utilization of oranges for processing that has been growing ever since. During the last 2 decades, in particular, there has been a striking shift toward processing use, thanks principally to gains by the popular citrus juice in frozen concentrated form.

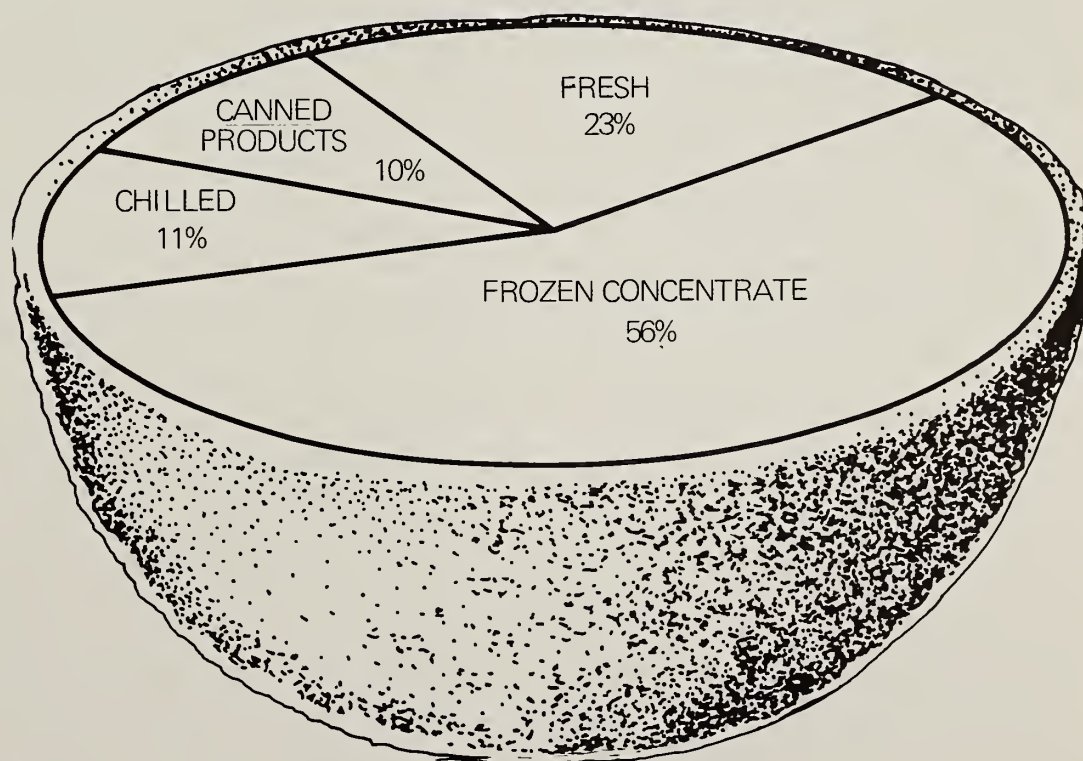
Florida, which supplies about three-fourths of the total U.S. orange crop, now processes more than 90 percent of its oranges. Of that 90-plus percent, nearly 80 percent

(including temples, tangelos, and honey tangerines) go to frozen concentrate.

For the U.S. orange crop as a whole, the percent of oranges processed is somewhat less. This is because oranges in the other major producing States—California, Arizona, and Texas—go more to supply the fresh market. California oranges in particular, due to their eating quality, juice content, and sweetness, are more adaptable to fresh use than processing.

Even so, 78 percent of the total U.S. orange crop in 1971/72 was processed in some form. Chilled orange products, like frozen concentrate, have shown gains (14 percent of the Florida orange crop in 1971/72 compared to 3 percent in 1954/55), with canned juice, sections, and citrus salad declining rapidly in the last 10 years to a relatively minor proportion of the total. (12)

Over Half of the 1971 Orange Crop Went Into Frozen Concentrate







**S**tatistics that show the U.S. is becoming a healthier Nation tend to gloss over local differences.

Compared with metro areas, rural America remains deficient in medical personnel and specialized health facilities. Moreover, rural residents generally find it harder to afford the high cost of illness.

Increasing urbanization and growing specialization in the health profession have drawn medical personnel and facilities to heavily populated towns and cities, leaving non-metro Americans with a declining number of rural doctors.

At least twice as many physicians practice in urban as in rural areas. This does not mean that people in rural areas are without care, but it does have two important implications.

First, rural people may have to travel longer distances to find medical care. Secondly, if there are relatively few physicians in an area, it may be difficult to see doctors who may already have more patients than they can handle.

However, the shortage of physicians in rural areas is confined largely to specialists, while the number of general practitioners is actually somewhat higher per capita than in urban areas.

The situation is similar for nurses, who make up roughly half the Nation's medical personnel. Though the ratio of nurses to population varies widely among States, rural areas average 223 nurses per 100,000 people, compared with 332 in urban areas.

Dentists, too, are harder to come by in rural America. A recent survey found there was one dentist for every 1,300 people in the District of

Columbia, New York, and Oregon. But in the more rural States of Arkansas, Mississippi, and the Carolinas, there was only one dentist to serve more than 3,000 residents.

**Enough hospitals.** Though short in doctors, nurses, and other medical personnel, rural regions appear to have enough hospitals—more, in fact, than urban areas. In 1970, rural America claimed 977 hospital beds per 100,000 population compared with 719 in metro areas.

But rural hospitals are relatively small, lack specialized equipment, and are staffed largely by general practitioners. The result: rural people must frequently turn to urban centers when they need the services of specialists.

In numerous other ways, rural residents get short-changed when it comes to health care, though their needs are just as great as the urban population's. Infant mortality and maternal death rates are higher in the rural sector. And substantially more rural than urban dwellers are hobbled by chronic illnesses like diabetes and heart disease.

Injuries that require medical treatment or curtail normal activities for at least 1 day also run higher in rural than urban areas. These injuries occur more frequently among nonfarm rural residents than farm dwellers.

**Insurance gap.** In terms of hospitalization and surgical insurance, the advantage again falls to urban residents. Rural farm families hold the lowest amounts of both types of insurance. The gap is partly explained by the greater opportunity given metro residents to take advantage of group policies where they work.

Thus, rural people, whose incomes average well below those of metro



residents, do not share equally in either the availability of health care or the ability to pay for it.

As for the high cost of medical care, no relief is in sight. In 1971, the health bill averaged \$358 per

person—about 2½ times the 1960 level. At this rate of increase, the figure could soar past \$800 by 1980. One analyst put it this way—7 years from now \$1 of every \$10 in the American economy may go for

paying the costs of health care.

Scores of Federal programs, either proposed or now in operation, are aimed at upgrading the quality and quantity of health services in the U.S.

Providing more medical personnel is the main thrust of several dozen manpower development and training programs administered by the Department of Health, Education and Welfare (HEW).

One program that's particularly suited to rural areas is called MEDEX. MEDEX people are former military corpsmen who receive refresher courses in civilian medicine, and then become assistants to practicing physicians.

Several programs focus on incentives for medical personnel to serve in rural areas by providing increased scholarships in the field of rural medicine, guaranteed incomes for the years when young doctors are setting up practice, and financial help with the start-up costs.

One of the newest programs of this type is the National Health Service Corps. This program assigns health personnel to rural areas certified by HEW as having inadequate medical services. The program also strives to keep medical personnel in the designated areas after they've finished their service with the Corps.

**Help for States.** The nationwide shortage of health facilities and personnel has sparked comprehensive health planning legislation. It provides incentives for States to draw up their own all-inclusive health care programs, and provides resources for the planning activities as well as the training of personnel to draft the plans.

Similarly, numerous health facilities construction programs help

States to plan and build hospitals, public health centers, emergency rooms, rehabilitation facilities, etc. The programs also supply consultation services on design, construction, and operation of the facilities.

Some of the myriad Federal health care programs—such as medical care for migrants—are specifically tailored to rural needs. Most, however, have no regional targets. In fact, a recent study of selected Federal programs revealed that per capita health care outlays were 4 times greater in metro than in nonmetro counties in fiscal 1970.

Concern about this disparity has spawned several new approaches to the delivery of health care to rural Americans. These are administered by several groups, including:

- ✓ government health departments,
- ✓ college and university medical schools,
- ✓ medical associations, and
- ✓ private physicians and foundations.

The first group—government health departments—was instrumental in creating the Beaufort-Jasper, S.C., Comprehensive Health Services, Inc., about 3 years ago. After months of planning, the project opened a main office in Beaufort and four satellite health care units in the surrounding area.

In the beginning, each center was staffed by a doctor, one or two nurses, a licensed practical nurse, several family health workers, a medical records clerk, and a receptionist. Two MEDEX workers were assigned to two of the teams. The project also hired a dentist to work out of a mobile dental unit in Jasper County, which formerly had only one dentist.

A laboratory serving the whole



project is located in one health center, and a well-stocked pharmacy in another. The county Public Health Service loans or leases the centers, and all services of the health project are free to residents with incomes below the poverty level.

Medical colleges and universities frequently supply health services to communities that might otherwise be without them. The Kirksville College of Osteopathy and Surgery is typical. Located in rural Missouri, the college operates clinics in 11 rural communities which have no resident physician.

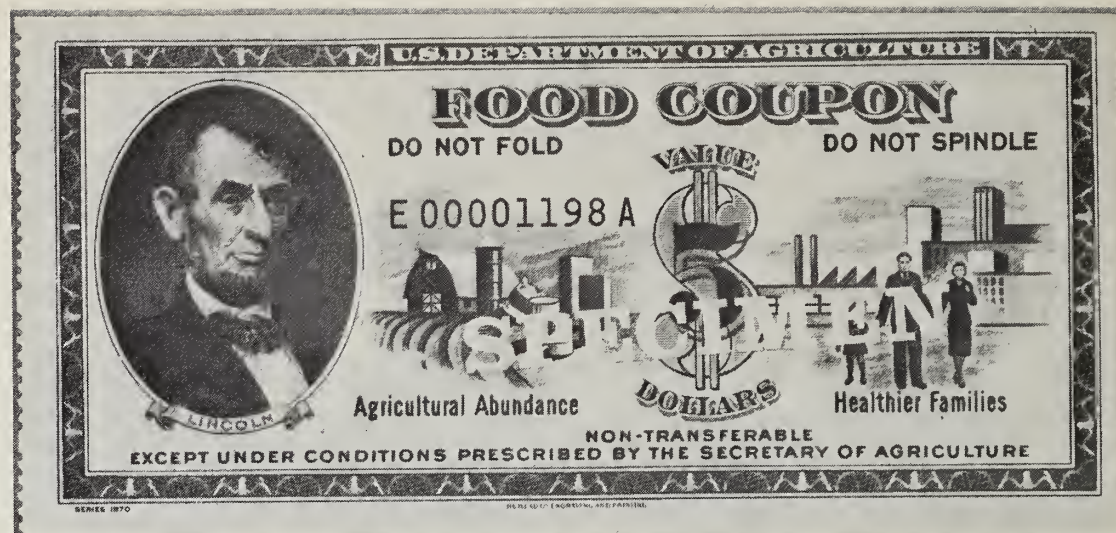
Each student at Kirksville must spend 4 months of his senior year at one of the clinics. All contain a pharmacy, a small laboratory, and waiting and examination rooms. A doctor from the college makes daily visits to the clinics to examine the previous day's records, to consult with students, and approve all medication before it's dispensed.

**Joint efforts.** Medical associations have also come up with some innovative approaches to rural health care. For example, the Illinois State Medical Society teamed with the Illinois Agricultural Association to supply more doctors to rural parts of the State.

The two organizations established a low-interest loan program for medical students who agree to practice medicine in rural Illinois for at least 5 years after completing their formal studies. At least 70 physicians are now working in rural Illinois as a result of this program.

Private doctors and foundations are also lending a hand. A private physician in Illinois has founded the Nation's first corps of airborne doctors. The group, named Physicians-on-Call, is composed of roughly 70 flying doctors who serve central and northern Illinois from their base near Chicago.

The doctors travel exclusively by air to bring aid to rural communities where medical care is either limited or nonexistent. Some 15 rural hospitals in the area also make use of Physicians-on-Call. (13)



## Food Stamps Help Fill Welfare Need

Food stamps like the one above can help meet the need for welfare in rural areas.

Although food stamp enrollment rates are higher in rural than in urban counties, the percentage of food stamp recipients also receiving public assistance is much lower, according to a new ERS study.

In metropolitan counties, 68 percent of the food stamp recipients also received public assistance in 1970, contrasted with 39 percent in nonmetropolitan counties. In the most rural counties only one-third of the food stamp recipients received public assistance. The study concluded that the Food Stamp Program is effectively filling part of the welfare need gap in farm counties.

Not surprisingly, the study also found that in 1970 enrollment rates for the program were substantially higher in rural than in urban counties—due primarily to a higher rate of poverty. After adjusting for poverty, however, the results showed that eligible persons in rural counties were no more likely to use food stamps than the urban poor.

Participation was found to be higher in counties with high percentages of blacks and other minorities. Again, this was ascribed to the higher incidence of poverty.

Counties with large numbers of aged persons (65 and over) had lower than average food stamp par-

ticipation rates. This is partly due to the transportation problems common to many of the rural poor. It is also tied to the provision that applicants with fixed assets (such as a house) beyond a certain amount are ineligible for stamps regardless of income, and to the requirement that participants must pay a minimal part of the value of the stamps. (16)

## Joplin: How a Community Continued To Grow After Its Top Industry Withered

There's many a town that's been abandoned when its main industry petered out.

But Joplin, Mo., has successfully switched from mining to a diversified manufacturing economy—a success story that led several researchers to study how it came about.

Today's Joplin has nearly 40,000 residents, a new college, expanded medical facilities, a city sales tax that provides more than a half million dollars a year for capital improvements, and a fair amount of new business locating there.

However, just after World War II Joplin faced the fact that the mining industry that had been its bread and butter for nearly a century was pretty well phased out. Joplin had all but exhausted its own lead and zinc ore deposits by 1920 but continued



on as a base for tri-State mining operations.

The city's critical transition period lasted until the early 1960's, and the city was apparently fortunate in having effective leadership.

At a time when it had less money because of the decline in mining, the city had a great need for improvements. The State had warned of legal action if the sewage treatment plant wasn't modernized . . . street repairs were imperative since traffic had increased 50 percent . . . the city dump had to be eliminated.

The city responded during this transitional period by embarking on an improvement program.

Residents approved a \$1.5-million bond issue for sewer improvements in 1957 and then another \$2.1 million in three bond issues in 1964-67 for capital improvements. In 1969 voters approved a 1-percent sales tax which now provides the money for capital improvements and also allows the city to get matching funds from the State and Federal governments.

The key instruments in the city's switch to an economy based on diversified manufacturing were found to be the chamber of commerce and the city government.

Together, they succeeded in getting nine new firms to locate in Joplin in the last 10 years.

The chamber provided interested firms with help on surveys on education, labor, wages, and transportation, furnished information about utilities and existing industries, and guided businessmen around town to locate suitable plant sites.

The city government helped primarily through floating industrial bond issues totaling \$10 million.

Among the main reasons the manufacturing firms gave for locating in Joplin were its markets and railroad and highway facilities.

As to the city's goals during the past years, the study sums it up with a quote from the city manager:

"To improve the quality of life, with the idea that by doing so it would help to attract additional industry into the city of Joplin." (14)

## '72 Census Shows Climb In Hired Farm Workers

For the second year in a row, the number of paid farm workers has gone up—reaching 2.8 million in 1972.

The reason? Overall high production last year, plus stepped-up farm exports and higher farm prices. This, reports ERS, created the need for more labor in '72 and encouraged farmers to stabilize their work force for '73.

From the annual Census survey of the hired farm working force—those 14 years of age or older who did some farm work for wages during the year—ERS found:

✓ Most workers were young, with a median age of 23 . . . most were white—85 percent . . . 3 out of 4 were male . . . and nearly 3 out of 4 were nonfarm residents.

✓ They averaged 88 days of farm wagework a year at \$13.20 a day, totaling \$1,160 for the year.

✓ Fewer than a fourth of the hired farm working force was engaged chiefly in farm work for a living. Of those who were, 367,000 were year-round workers and were the most fully employed and the highest paid, averaging 306 days of farm wagework for which they earned \$4,358.

✓ More than half were not in the labor force most of the year. These were primarily housewives and students.

✓ Some 184,000 persons—about 7 percent of the total hired farm working force—were domestic migratory workers. The increase over 1971's 172,000 persons marked the first rise in nearly 10 years.

✓ Regionally, 41 percent of the hired farm working force lived in the South, 8 percent in the Northeast, 26 percent in the North Central States, and 25 percent in the West.

✓ Of the 2.8 million paid farm workers, nearly 1.6 million did farm wagework only, about 32,000 more than in 1971.

ERS compared averages for 1967-69 and 1970-72 and found:

The total number of persons doing

farm work for wages had gone down more than 8 percent.

There were nearly 7 percent fewer workers putting in 250 or more days of farm work for wages; 5 percent fewer in the 75- to 249-day bracket; and nearly 11 percent fewer workers putting in less than 75 days.

Total man-days of farm wagework declined by nearly 8 percent. (17)

## Seeking New Industry? Study Sets Guidelines

A Pennsylvania study takes a how-to-do-it approach for rural communities wanting to attract new industry.

First, the community should decide why it needs new industry and how much it needs. Is it needed to decrease unemployment and if so, what type—male, female, unskilled . . . ? Or is it needed to raise per capita incomes, provide a stimulus to overall growth, or replace declining industries? Included in the study is a 10-page questionnaire a community could fill out that would give a complete inventory of its resources—from population profiles to transportation facilities and local tax rates.

Next the community should determine the types of industries that would best suit its needs.

Helping out in this area, the study done by Pennsylvania State University in cooperation with ERS pinpoints 150 growth industries in that State and their characteristics of interest to the community.

With a list of industry prospects that would fit a needed niche, the community might then put out a dragnet to find individual firms.

A good starting place is the State industrial development department or utility companies, railroads, and other economic development groups that keep current lists of firms seeking sites on which to locate or expand.

When it comes to screening individual firms, the study outlines four broad criteria: financial soundness, use of community resources, achievement of local development goals and environmental desirability. (18)



In today's America, farmers make up less than 5 percent of the population, and the total number of rural residents accounts for only 30 percent. All together, 70 percent of the people live on 2 percent of the land.

So it might seem that agricultural economists have a smaller role to play than in the past. But exactly the reverse is true.

For one thing, our urban and rural sectors are more closely linked than ever before. This means many problems facing city dwellers have aspects that can't be dealt with in just a metropolitan context. Some of the solutions lie in nonmetro areas, and agricultural economists are among the people responsible for finding them.

**City blues.** Consider a few salient features of the current urban scene—

"Our cities are falling apart," is the curt description offered by one observer. "We can't dispose of human wastes in a satisfactory manner; we can't dispose of our garbage; we can't eliminate the smoke and the smog; and we can't control crime and violence. We need new and improved educational services, airport services, police services, rapid transit services, park and recreation

## ECONOMISTS IN AN URBAN AGE

services, and all kinds of housing . . ."

If that sounds like the big city blues pure and simple, keep in mind that the blues started out as country music. Likewise, the present crisis has its own backwater roots.

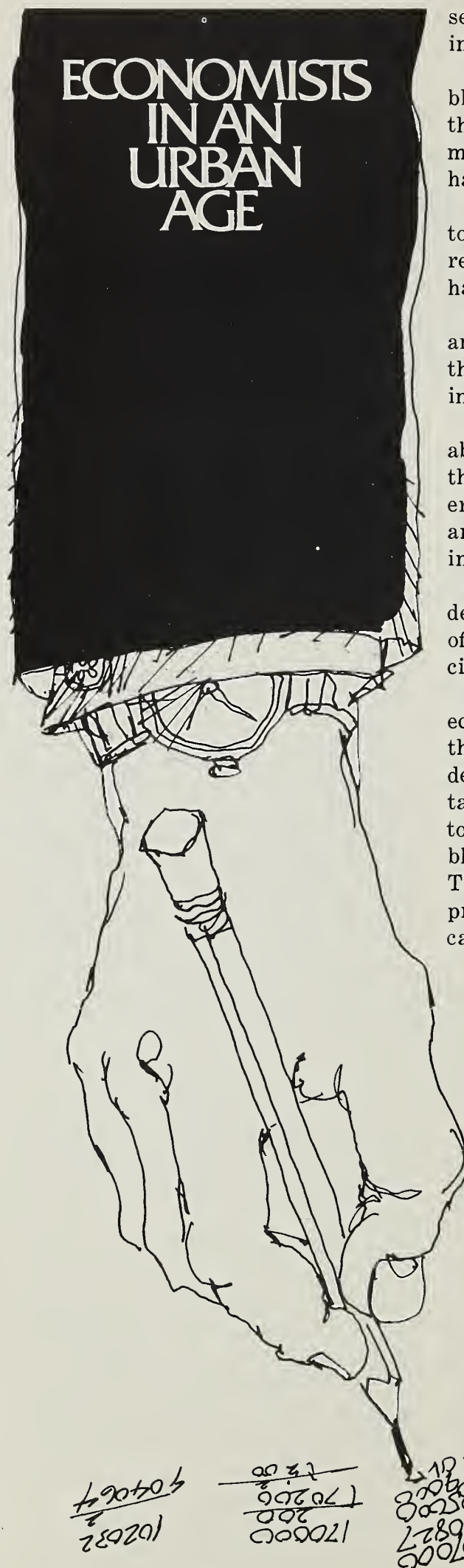
Lack of opportunity in small towns across the U.S. is driving out residents who might remain if they had a choice.

The point is, they often don't have any choice. And they move to jobs in the cities, leaving behind the old, the infirm, and the unskilled.

Although rural areas claim only about one-third of the population, they contain half the Nation's poverty, nearly two-thirds the substandard housing, and only one-fourth the income.

What's needed now is a way to develop nonmetro areas so they will offer viable alternatives to life in the cities.

**Deep involvement.** Agricultural economists are deeply involved in this work. Part of their job is to describe the current situation in detail and spotlight trends. Another is to come up with economically feasible ways to aid specific rural regions. They also relate the costs of ongoing programs to their benefits and forecast the results of proposed changes.





Together with other economic specialists, they are attempting to discover the optimum rural-urban balance.

One issue that has become important to people in both the country and the cities is the environment. And here again agricultural economists are being called on for assistance.

Under pollution control acts passed in 1972, agriculture must begin policing its operations. Although the task carries a price tag, no one is certain yet how big it will be. Nor does anyone know for sure how the cost will be distributed or what paying it will mean for consumers and the agricultural sector. Economic researchers are at work finding out, however, and some answers are beginning to emerge that hint at the problem's complexity.

**Polluting feedlots.** Feedlots are an instance in point. Last year's Federal Water Pollution Control Act indicts them specifically as pollution sources and directs the Environmental Protection Agency to establish clean-up guidelines.

One preliminary estimate is that the cost between 1971 and 1980 may run to \$1.9 billion in capital investment and another \$1.8 billion in operating expenses.

Researchers expect that operators will try to minimize the financial blow by moving to sparsely populated areas with low rainfalls and by consolidating into more commercial units. Both developments could have major consequences for the economy in some parts of the country.

In the case of hogs, the price might be high enough to drive out many of the operations that now produce two-thirds of the Nation's pork.

**Problems galore.** This is just one pollution problem and a few of its spinoffs. Besides animal wastes, agricultural economists are also trying to point out and analyze similar difficulties caused by restrictions on pesticides, chemical fertilizers, sediment runoff, crop residues, and agricultural processing wastes.

**More worries.** Yet rural America has more to worry about than pollution. It has nutritional problems, for example.

In 1969, two agricultural economists at Penn State University began wondering exactly how effective the Food Stamp and Commodity Distribution Programs were as ways of raising dietary levels in rural areas.

Working with food experts at the University, they initiated a project in two counties to find out.

The counties, Bedford and Huntingdon, lie end to end, stretching north from the Maryland border into central Pennsylvania's wooded hills. Both are poor, both are overwhelmingly rural, and both have sizable groups participating in Federal feeding programs.

The study's results, published in 1972, indicated that food stamps did little to raise nutritional levels and direct distribution did even less.

**Benefits weighed.** Meanwhile, other projects began in North Carolina and Iowa using data gathered by the Poverty Research Institute at the University of Wisconsin. One purpose was to compare the nutritional benefits gained under a negative income tax system of poverty relief with those accruing under the Food Stamp Program.

The studies are still underway, and they are not extensive enough to give a national picture. But we are getting the first concrete evidence to date of how well we have succeeded in raising the nutritional levels of low income families. We may get some idea of where to go from here as well.

The increased attention agricultural economists are giving to these various problems raises several striking points.

**Broader questions.** It's clear, first of all, that researchers today are not restricting themselves to the farm firm or input, processing, and marketing issues. They're asking broader questions about rural society as a whole. And that marks a departure from the pattern prevailing dur-

ing much of the last 2½ decades.

A common belief in years past was that farmers could be adequately aided by pumping money into support payments, nonrecourse loans, and the like. But we can see now that's not enough. Farm problems have to be viewed in the context of rural life. Commodity supports won't fill the void left when a farmer's community starts disappearing along with its system of services and its opportunities for off-farm income.

Similarly, there was a feeling that farmers earned less than city workers because there were too many of them. With this went a conviction that they should be freed from the land for urban jobs.

**Countryside calls.** Yet in the last 20 years the farm population has dropped by half, the cities have ballooned—and farmers still make less than other Americans. In the interests of city and rural people alike, we need more, not fewer, people in the country.

Increasingly rural and urban America are drawing together, and agricultural economics is reflecting the trend. At the same time, however, many members of the profession continue to carry on more familiar tasks: they still describe and predict changes in U.S. farming; they still provide analyses of commodity programs; they still make long- and short-run forecasts of farm output; they still interpret data on agricultural and economic conditions in foreign countries.

In performing many of their traditional functions, agricultural economists are confronting a fairly recent problem that's as fundamental as it is complicated.

The post World War II revolution in American farming has so changed the shape of the agricultural sector that available statistics don't describe the situation as accurately as they should.

Researchers need more data. Equally important, they need new conceptual formats that will reflect the realities of American agriculture in an urban age. (19)

[*Last in a series*]



*With months to go before the new harvest, Asia faces a rice shortage that could get critical unless the 1973 crop lives up to farmers' expectations.*

November is always a red-letter month in the Asian calendar, but this year more so than usual.

Not since the poor monsoon years of the mid-sixties has Asia's rice store been this empty. Hopefully, relief will come in November with the new rice harvest.

Farmers are counting on a much larger crop than the disappointing one of 1972, when Japan was the only Far Eastern country to report a significant increase in production. Most of the others in Asia suffered sharp declines—over 12 percent in India, Thailand, and Cambodia. In these three countries, the bad harvest was blamed on late and sparse monsoon rains. The problem in South Korea and the Philippines was just the reverse—too much rain and damaging floods in the rice fields.

This year's crop should indeed be better, assuming a return of normal monsoon rain in the summer and combined with wider use of high-yielding rice varieties and fertilizer.

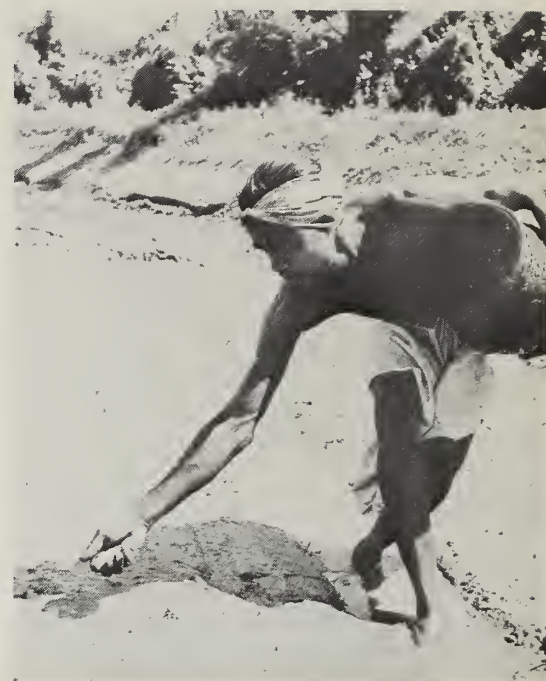
Meantime, many Asians are having to make do with what remains of last year's harvest, which is not very much. In fact, even the major rice exporters in Asia now have scant supplies to offer their neighbors.

Thailand—world's leading rice shipper—put a tax on rice exports to insure enough rice for its own people; then in March, it decided to suspend exports entirely. At that time export prices were running at record highs in Bangkok, and had spurted up by more than 50 percent from a year earlier.

Elsewhere in Asia, Burma is sold out; Pakistan is getting low on export supplies; and Japan, though in a better stock position, finds rice exports to be uneconomical under its program of subsidies to rice growers.

In the U.S., now second to Thailand as a rice exporter, stocks have also

# RICE SHORTAGE TIGHTENS IN ASIA



been drawn down to pipeline levels due to the brisk export demand. However, the situation for U.S. rice stands to improve as a result of a 20-percent increase in the acreage allotment for the crop to be harvested next July.

Supplies permitting, our exports to Far Eastern markets might top 2 million tons in 1973, up from 1972's record 1.4 million. Most goes to South Korea, Indonesia, and South Vietnam under P.L. 480.

Thanks mainly to the bigger imports from the U.S., the People's Republic of China, and Pakistan, the Far East this year is likely to import more than in 1972 when it took 4.7

million tons. Indonesia alone will probably come in for over 1 million tons, up from 0.7 million in 1972.

Imports by a number of countries are apt to exceed 500,000 tons this year, including South Korea, the Philippines, and Bangladesh. South Vietnam, Hong Kong, and Sri Lanka (Ceylon) are also getting more rice, and each market is expected to import over 400,000 tons in 1973.

If by chance Asia's rice crop runs into trouble again this year, food shortages and famine could be averted by importing other grains. That's how Asia coped with the poor rice crops of the 1960's. On the other hand, world food grain supplies are





*Facing page, farmer sows rice in Sri Lanka, where the rice shortage is most acute; and buffalo plows field in Thailand, usually Asia's No. 1 rice exporter but now with little to sell. Left, harvesting rice in Pakistan. Lower left, rice grows on terraces in the mountains of the Philippines, which in recent years became a rice importer. Below, the traditional bowl of rice completes the diet for families of Chinese fishermen. (Photos: FAO, United Nations.)*



now less abundant, and more costly to buy, than in the mid-sixties.

Asian governments have taken various steps to deal with rice shortages, but the task has not been easy.

In South Korea, programs to encourage consumers to switch from rice to less expensive cereals resulted in a sizable cut in rice imports—from a record 1 million tons in 1971 to about 700,000 in 1972. But imports bounced up again in early 1973 because of summer floods in 1972 and a decline in rice output. Now South Korea has "riceless days" in effect for 2 days each week in restaurants, and barley and other rice substitutes

are being promoted.

Sri Lanka and several other countries use a rice rationing system. In Sri Lanka, consumers can get 2 pounds of free rice each week plus 2 pounds at about half the wholesale price. But Sri Lanka can't get all the rice it needs from local supplies, nor can it finance imports to honor the pledge of rice handouts for all.

India's problem is one of not enough foreign exchange to buy the rice it has been importing from Thailand and Egypt the past 2 years through trade agreements. Instead of rice imports, India is stepping up imports of cheaper wheat and coarse grains.

Urbanization in Asia isn't helping the situation. About half of Asia's population increase has been in urban centers in the last decade. As they move to the cities, Asians also change their dietary patterns, consuming more rice and less coarse grains and cassava.

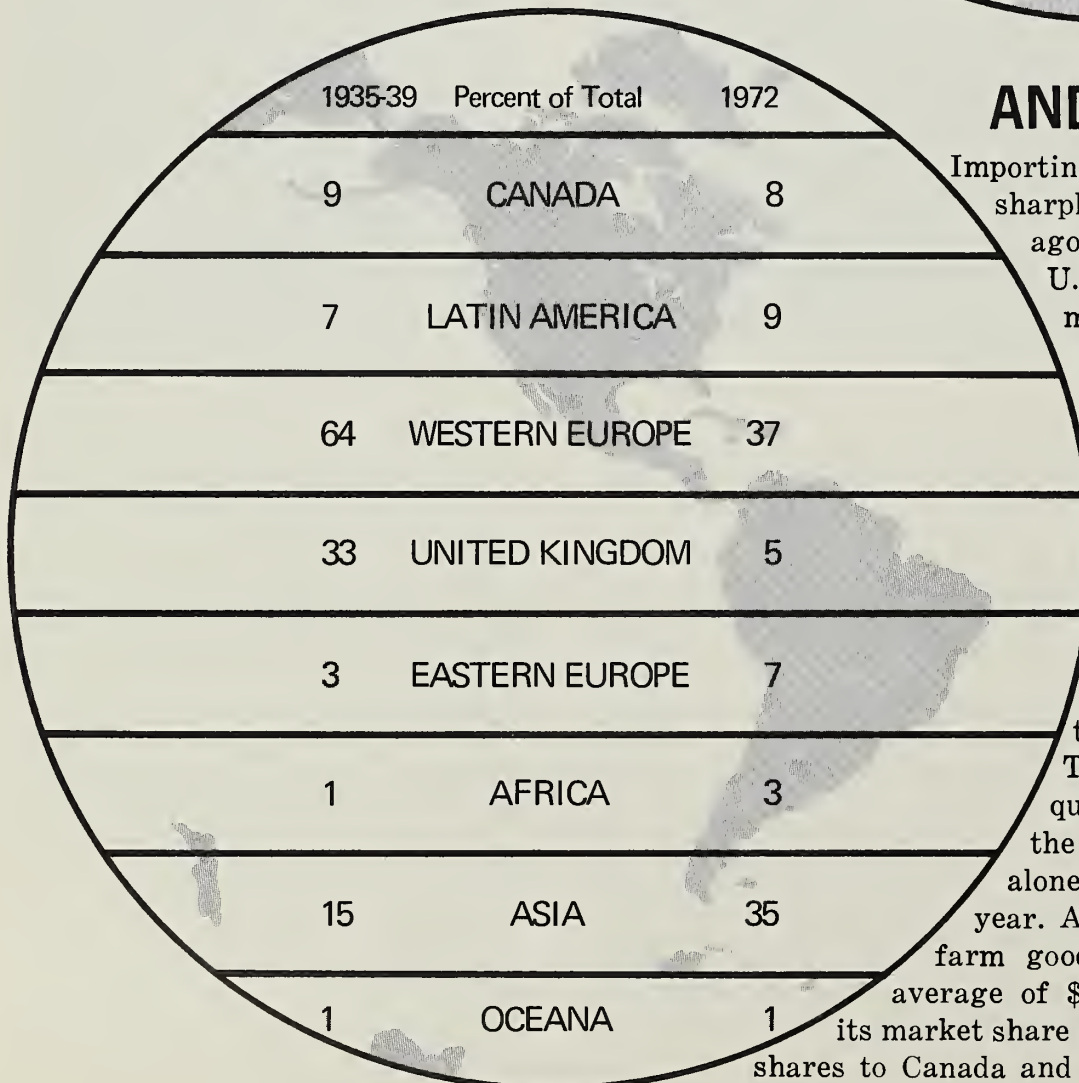
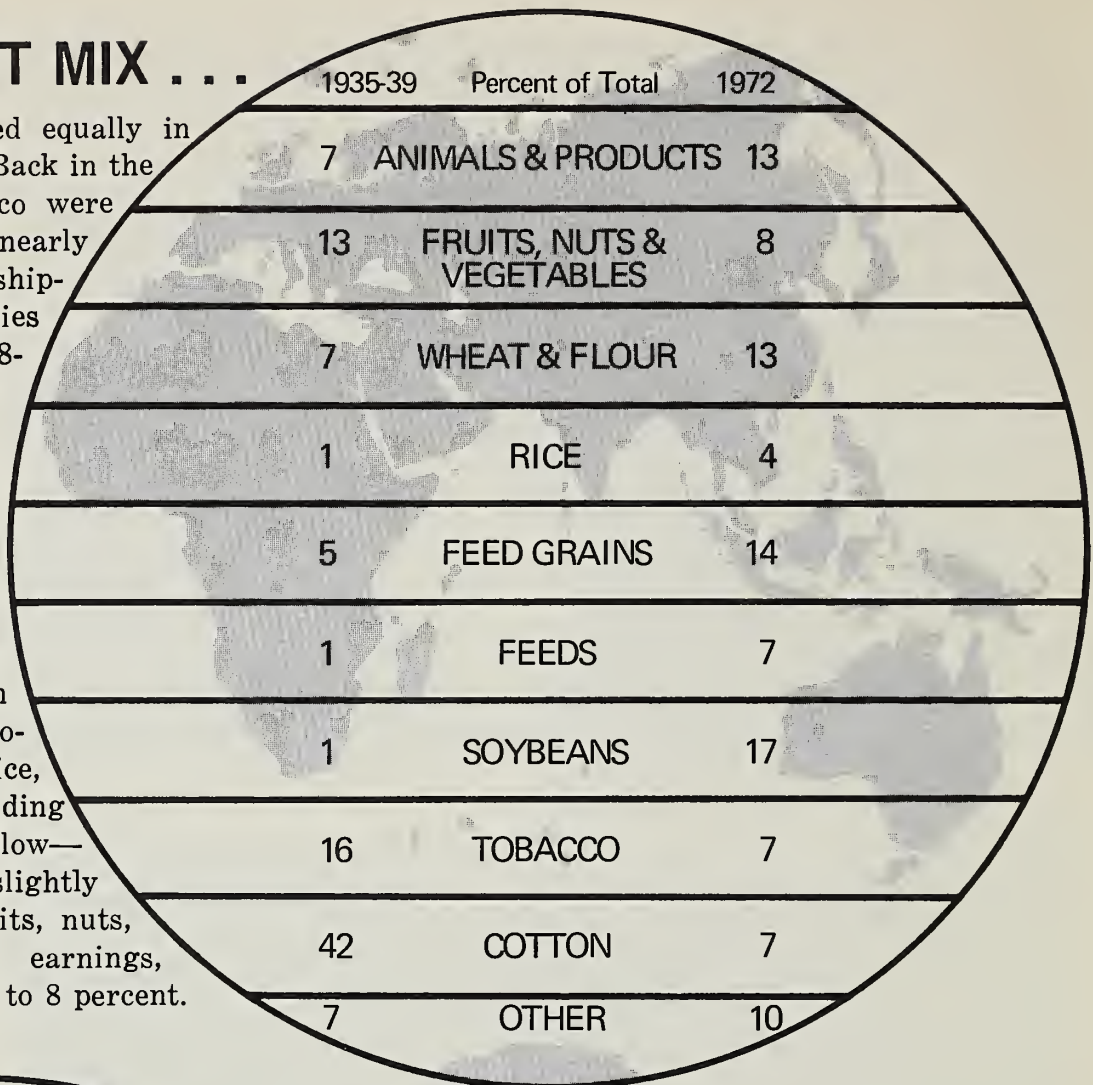
Governments try to buy from farmers the rice that urban dwellers demand, but this approach has met little success except in Japan and Pakistan.

In Asia, rice farms are usually small, and reserves for household use take priority no matter how attractive the price paid by government procurement programs. (20)



## EXPORTS: A DIFFERENT MIX . . .

Individual commodities have not shared equally in the overall growth of U.S. farm trade. Back in the late thirties, cotton, wheat, and tobacco were our chief exports, and accounted for nearly two-thirds of the value of annual farm shipments. In fiscal '72 these commodities failed to muster even a third of the \$8-billion export market. After World War II, foreign trade swung in favor of U.S. feed grains, soybeans, and oil cake and meal. Soybeans' share of the U.S. farm export market jumped from 1 to 17 percent from 1935-39 to 1972, and feed grains' share, from 5 to 14 percent. Together, these commodities earned more than \$3 billion in fiscal '72 and accounted for about two-fifths of our total farm exports. Rice, animals, and animal products—including hides and skins, variety meats, and tallow—boosted their market shares only slightly since the late thirties. And while fruits, nuts, and vegetables raised their export earnings, their share of the market sank from 13 to 8 percent.



## AND CHANGING MARKETS

Importing nations divide up U.S. farm exports in sharply different portions than a few decades ago. During 1935-39 nearly two-thirds of all U.S. agricultural exports—valued at \$760 million annually—were destined for Western Europe, including the United Kingdom. By 1972 this share was whittled to just over a third. Nevertheless, Western Europe remains our top farm market, with 1972 purchases totaling \$3.5 billion. Runner-up last year was Asia with \$3.2 billion. Asia carved out 35 percent of our farm export market—more than double its share in the late thirties. Though Japan dominates the Asian market, developing countries like Taiwan and Korea now import mounting quantities of U.S. agricultural products. In the Far East, sales to developing countries alone are expected to top \$2 billion for this year. Africa bought nearly \$300 million in U.S. farm goods last year, compared with an annual average of \$8 million in the late thirties. However, its market share advanced only from 1 to 3 percent. Export shares to Canada and Latin America remained stable. (22)



## Coffee's Strong In Colombia But Other Products Gaining

When you think of Colombian agriculture, you're apt to think of coffee. Colombia is the world's second largest producer and exporter of coffee beans and the leading supplier of mild arabic varieties.

Coffee has played a starring role in Colombia's agriculture since the end of World War II when favorable world prices encouraged intensive plantings. In the 1960's lower world prices and export restrictions imposed by the International Coffee Agreement stabilized production.

Growth of the Colombian economy still vitally depends on coffee. It provided about 55 percent of the country's export earnings of around \$775 million during 1972. The U.S. is by far the leading market for Colombian coffee beans, with purchases of \$177.5 million in 1972.

Nevertheless, Colombia is determined to step up production of other commodities for which the market picture looks brighter, particularly bananas, cotton, and sugar. More

and more of these Colombian products are turning up in foreign markets as agricultural diversification takes root.

After coffee, cotton and bananas are now Colombia's chief agricultural exports.

During 1950-59, Colombia was a net importer of cotton. Since then, with the exception of 1965, it has been a net exporter, with 1970 shipments of about \$34 million. The principal buyers of Colombian cotton are West Germany, the United Kingdom, France, and the Netherlands. East Germany and Spain are new customers.

The textile industry—based on cotton—has emerged as one of Colombia's most important industries, employing 1 in 3 workers in the manufacturing sector. Cotton textiles, however, will continue to face stiffer competition from synthetics which could affect both the domestic and export markets.

Banana production has doubled over the past 2 decades to 850,000 tons. Roughly 40 percent are exported, primarily to West Germany, Switzerland, France, and the Nether-

lands. Annual earnings from bananas usually top \$20 million.

Colombia's farmers find that gross returns per hectare are higher for bananas than for any other crop.

Sugar is Colombia's fourth largest agricultural export, with annual shipments of approximately \$15 million. The country had been a net importer of sugar until the 1960's and the severing of U.S. trade ties with Cuba. Spurred by new opportunities in the export market, Colombia's centrifugal sugar output rose from 200,000 tons in 1950 to over 800,000 tons in 1972. And sales to the U.S. shot up from \$4.2 million in 1964 to nearly \$15 million in 1969.

Prospects for increased sugar production look even better in the years ahead. Acreage for production of centrifugal sugar is expanding and higher-yielding varieties have been widely accepted by sugarcane farmers. Also, better cultural methods are being used, and newer mills with higher milling rates have been built.

In addition to seeking a larger quota to sell sugar to the U.S., Colombia is working to develop new sugar markets in East Europe. (23)

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## Recent Publications

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**Field and Seed Crops: Revised Estimates, 1964-69: Production, Farm Use, Sales, Value.** Statistical Reporting Service. Stat. Bull. No. 513.

This report presents revised estimates of farm use, sales, and value of field and seed crops for 1964-69 in keeping with revisions of estimated production for this period. These estimates replace those released annually in the reports "Field and Seed Crops—Production, Farm Use, Sales, and Value."

**The Economic Impact of Cancelling the Use of 2, 4, 5-T in Rice Production.** Arthur R. Gerlow, Farm Production Economics Division. ERS 510.

The primary objective of this report is to estimate the economic im-

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*Single copies of the publications listed here are available free from The Farm Index, Office of Management Services, U.S. Department of Agriculture, Washington, D.C. 20250. However, publications indicated by (\*) may be obtained only by writing to the experiment station or university. For addresses, see the July and December issues of The Farm Index.*

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pact of restricting the use of 2, 4, 5-T in the major rice areas of the United States. Subjects considered are the reasons for using 2, 4, 5-T, the availability of herbicide substitutes, the

cost of 2, 4, 5-T applications, and the economic benefits derived from use.

**Potential for Oilseed Sunflowers in the United States.** W. K. Trotter, Richard B. Russell Agricultural Research Center, Athens, Ga.; W. D. Givan, Farm Production Economics Division, University of Georgia; H. O. Doty, Jr., and J. V. Lawler, Marketing Economics Division, AER 237.

This report examines recent trends in domestic fats and oils markets and the possible place of sunflower oil in these markets. Estimates are developed of the yield per acre and price required of sunflowerseed to make it competitive with established crops in the two areas. Also, estimates are made of the costs and profitability of



processing sunflowerseed in southern screw-press mills.

**An Economic Analysis of the Lake of the Woods—Rainy Lake Region of Minnesota.** Jerome M. Stam, Economic Development Division, formerly with the University of Minnesota. University of Minnesota Miscellaneous Report 115—1972.\*

This 249-page study focuses on the region's major natural resource-based export activities—agriculture, fisheries, forestry, and tourism. The study area covers 4.3 million acres in Minnesota.

**Industrial Growth for Rural Communities.** T. E. Fuller, Economic Development Division, and N. B. Gingrich and J. Dean Jansma, Pennsylvania State University. Department of Agricultural Economics and Rural Sociology, Pennsylvania State University, A. E. & R. S. 101, January 1973.\*

How rural communities might successfully compete in the marketplace for new industry and how they might sustain themselves as a viable economic unit is the subject of this

study, which focuses on Pennsylvania.

**Pakistan's Agricultural Development and Trade.** Amjad H. Gill, Foreign Demand and Competition Division. ERS-For. 347.

Recent trends and developments in Pakistan's agricultural production and trade are discussed. The two major goals of the Pakistani Government are to attain self-sufficiency in food and to earn sufficient foreign exchange to maintain agricultural and industrial development.

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## Article Sources

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Readers are invited to write for the complete reports, studies, speeches, or papers on which we base our articles. Authors and titles are listed below, preceded by numbers corresponding to those appearing at the end of stories in this issue. Those publications indicated by (\*) are obtainable only from the university or experiment station cited. The word "manuscript" after an item denotes a forthcoming publication, which we will send you when it comes off press. "Special material" after an item means the article was researched specially for this magazine, although additional information is generally available. Address all inquiries to The Farm Index, Office of Management Services, U.S. Department of Agriculture, Room 1459, Wash., D.C. 20250.

1. W. Fred Woods, FPED. Increasing Impact of Federal Estate and Gift Taxes on the Farm Sector—Present Law and Proposed Changes (manuscript).
2. Warren R. Grant, J. Bruce Hottel, and Troy Mullins, FPED. Estimated Costs and Returns Per Acre of Rice in the Major U.S. Rice Areas, 1972 Season (manuscript).\*
3. George W. Kromer, ESAD. "An Economic View of Soybeans and Food Fats in the 1980's (speech to Institute of Shortening and Edible Oils, Inc., Scottsdale, Ariz., March 16, 1973).
4. Richard C. Raulerson, U.S. Department of Commerce, and Warren K. Trotter, MED. The Demand for Farm-Raised Channel Catfish in Supermarkets: Analysis of a Selected Market (manuscript).
5. Herman W. Delvo, Robert P. Jenkins, and Austin S. Fox, FPED. Economic Impact of Discontinuing Farm Use of Lindane and BHC (manuscript).
6. Allen G. Schienbein and Carl J. Vosloh, Jr., MED. *Cost of Storing and Handling Grain and Controlling Dust in Commercial Elevators, 1971-72: Projections for 1973-74*, ERS-513.
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8. Raymond D. Schar, ARS (special material).
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10. Tony A. Mathis, ESAD. *Dairy Situation*, DS-344, March, 1973.
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13. Tresa H. Matthews, EDD. Health Services in Rural America (manuscript).
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18. David E. Brewster, agricultural historian, ESAD (special material).
19. John B. Parker, Jr., FDGD. "Asia's Rice Shortage Reaches a Critical Level," *The Agricultural Situation in the Far East and Oceania*, ERS For. 353.
20. Dewain H. Rahe, FDGD. "U.S. Agricultural Trade Position" (speech at National Workshop on How to Develop Export Markets for U.S. Food and Agricultural Products, Michigan State University, East Lansing, Mich., Feb. 28-March 1, 1973).
21. Gae A. Bennett, FDGD. *Agricultural Production and Trade of Colombia*, ERS-For. 343.

NOTE: Unless otherwise indicated, authors are on the staff of the Economic Research Service (ERS) with their divisions designated as follows: Economic and Statistical Analysis Division (ESAD); Economic Development Division (EDD); Farm Production Economics Division (FPED); Foreign Demand and Competition Division (FDGD); Foreign Development Division (FDD); Marketing Economics Division (MED); and Natural Resource Economics Division (NRED).



# Economic Trends

Item	Unit or Base Period	1967	Year	1972		1973	
				Feb.	Dec	Jan.	Feb.
<b>Prices:</b>							
Prices received by farmers	1967=100	—	126	122	137	144	149
Crops	1967=100	—	116	110	127	131	132
Livestock and products	1967=100	—	133	131	145	153	161
Prices paid, interest, taxes and wage rates	1967=100	—	127	123	131	134	136
Family living items	1967=100	—	124	123	127	129	131
Production items	1967=100	—	122	118	129	132	134
Ratio <sup>1</sup>	1967=100	—	99	99	105	107	110
Wholesale prices, all commodities	1967=100	—	119.1	117.3	122.9	124.5	126.9
Industrial commodities	1967=100	—	117.9	116.5	119.4	120.0	121.3
Farm products	1967=100	—	125.0	120.7	137.5	144.2	150.9
Processed foods and feeds	1967=100	—	120.8	118.8	129.4	132.4	137.0
Consumer price index, all items	1967=100	—	125.3	123.8	127.3	127.7	128.6
Food	1967=100	—	123.5	122.2	126.0	128.6	131.1
<b>Farm Food Market Basket: <sup>2</sup></b>							
Retail cost	1967=100	—	121.3	120.3	123.8	127.2	130.4
Farm value	1967=100	—	124.4	122.4	131.4	140.3	145.1
Farm-retail spread	1967=100	—	119.3	119.0	119.0	118.9	121.1
Farmers' share of retail cost	Percent	—	40	39	41	43	43
<b>Farm Income: <sup>3</sup></b>							
Volume of farm marketings	1967	100	111	88	126	126	86
Cash receipts from farm marketings	Million dollars	42,693	58,550	3,834	5,719	6,043	4,700
Crops	Million dollars	18,434	24,233	1,218	2,895	2,769	1,600
Livestock and products	Million dollars	24,259	34,317	2,616	2,824	3,274	3,100
Realized gross income <sup>4</sup>	Billion dollars	49.0	66.4	—	70.6	—	—
Farm production expenses <sup>4</sup>	Billion dollars	34.8	47.2	—	49.4	—	—
Realized net income <sup>4</sup>	Billion dollars	14.2	19.2	—	21.2	—	—
<b>Agricultural Trade:</b>							
Agricultural exports	Million dollars	—	9,404	714	1,110	1,136	1,179
Agricultural imports	Million dollars	—	6,459	592	550	649	615
<b>Land Values:</b>							
Average value per acre	Dollars	<sup>6</sup> 168	<sup>7</sup> 216	—	—	—	—
Total value of farm real estate	Billion dollars	<sup>6</sup> 181.9	<sup>7</sup> 228.1	—	—	—	—
<b>Gross National Product: <sup>4</sup></b>							
Consumption	Billion dollars	793.9	1,151.8	—	1,194.9	—	—
Investment	Billion dollars	492.1	721.0	—	745.7	—	—
Government expenditures	Billion dollars	116.6	180.4	—	193.4	—	—
Net exports	Billion dollars	180.1	254.6	—	259.3	—	—
	Billion dollars	5.2	—4.2	—	—3.5	—	—
<b>Income and Spending: <sup>5</sup></b>							
Personal income, annual rate	Billion dollars	629.3	935.9	908.5	982.9	985.6	993.9
Total retail sales, monthly rate	Million dollars	26,151	37,365	35,345	39,417	40,707	41,305
Retail sales of food group, monthly rate	Million dollars	5,759	7,918	7,665	8,071	8,476	8,435
<b>Employment and Wages: <sup>5</sup></b>							
Total civilian employment	Millions	74.4	<sup>8</sup> 81.7	<sup>8</sup> 80.6	<sup>8</sup> 82.8	<sup>8</sup> 82.6	<sup>8</sup> 83.1
Agricultural	Millions	3.8	<sup>8</sup> 3.5	<sup>8</sup> 3.4	<sup>8</sup> 3.6	<sup>8</sup> 3.5	<sup>8</sup> 3.4
Rate of unemployment	Percent	3.8	5.6	5.8	5.1	5.0	5.1
Workweek in manufacturing	Hours	40.6	40.6	40.4	40.7	40.3	40.9
Hourly earnings in manufacturing, unadjusted	Dollars	2.83	3.81	3.72	3.95	3.98	3.97
<b>Industrial Production: <sup>5</sup></b>	1967 = 100	—	114	110	119	120	121
<b>Manufacturers' Shipments and Inventories: <sup>5</sup></b>							
Total shipments, monthly rate	Million dollars	46,449	62,356	59,199	66,387	68,299	68,943
Total inventories, book value end of month	Million dollars	84,599	107,047	102,161	107,047	107,549	108,454
Total new orders, monthly rate	Million dollars	46,763	63,368	59,792	67,668	69,838	70,800

<sup>1</sup> Ratio of index of prices received by farmers to index of prices paid, interest, taxes, and farm wage rates. <sup>2</sup> Average annual quantities of farm food products purchased by urban wage-earner and clerical worker households (including those of single workers living alone) in 1959-61—estimated monthly. <sup>3</sup> Annual and quarterly data are on 50-State basis. <sup>4</sup> Annual rates seasonally adjusted fourth quarter. <sup>5</sup> Seasonally adjusted. <sup>6</sup> As of March 1, 1967. <sup>7</sup> As of March 1, 1972. <sup>8</sup> Beginning January 1972 data not strictly comparable with prior

data because of adjustment to 1970 Census data.

Sources: U.S. Dept. of Agriculture (Farm Income Situation, Marketing and Transportation Situation, Agricultural Prices, Foreign Agricultural Trade and Farm Real Estate Market Developments); U.S. Dept. of Commerce (Current Industrial Reports, Business News Reports, Monthly Retail Trade Report and Survey of Current Business); and U.S. Dept. of Labor (The Labor Force and Wholesale Price Index).



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